

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: October 15, 1999, 00:29:31 ; Search time 29.22 Seconds  
(without alignments) 255.037 Million cell updates/sec

Title: US-09-185-258-6  
Perfect score: 1001  
Sequence: 1 EKPLHALLHGGRGYCLNEKSY.....GMEYYDGFQCHTFDSSVNE 186

Scoring table: BLOSUM62

Searched: 122810 seqs, 40065486 residues

Database : PIR\_60:  
1: pir1:  
2: pir2:  
3: pir3:  
4: pir4:  
\* type

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query	Match	Length	DB	ID	Description
1	99.5	99.4	272	2	A53748		insulin-like growth factor-binding protein 5 precursor - human
2	98.0	97.9	271	2	JC1584		insulin-like growth factor-binding protein 5 precursor - human
3	96.8	96.7	271	2	JC14604		insulin-like growth factor-binding protein 5 precursor - human
4	96.5	96.4	271	2	JC1463		insulin-like growth factor-binding protein 5 precursor - human
5	35.3	35.3	291	2	JN0164		insulin-like growth factor-binding protein 5 precursor - human
6	34.6	34.6	266	2	A35037		insulin-like growth factor-binding protein 5 precursor - human
7	34.4	34.4	291	1	IOHD3		insulin-like growth factor-binding protein 5 precursor - human
8	32.7	32.7	292	2	A36748		insulin-like growth factor-binding protein 5 precursor - human
9	32.1	32.1	291	2	J44602		insulin-like growth factor-binding protein 5 precursor - human
10	30.8	30.8	111	2	B45403		insulin-like growth factor-binding protein 5 precursor - human
11	26.7	26.7	240	2	A39442		insulin-like growth factor-binding protein 5 precursor - human
12	25.2	25.2	238	2	J48605		insulin-like growth factor-binding protein 5 precursor - human
13	24.2	24.2	226	2	JN0464		insulin-like growth factor-binding protein 5 precursor - human
14	24.2	24.2	258	2	A45403		insulin-like growth factor-binding protein 5 precursor - human
15	23.8	23.8	237	2	J44031		insulin-like growth factor-binding protein 5 precursor - human
16	23.7	23.7	258	2	G01662		insulin-like growth factor-binding protein 5 precursor - human
17	23.7	23.7	B3725	2			insulin-like growth factor-binding protein 5 precursor - human
18	22.5	22.5	254	2	A45599		insulin-like growth factor-binding protein 5 precursor - human
19	22.5	22.5	254	2	I49603		insulin-like growth factor-binding protein 5 precursor - human
20	22.5	22.5	254	2	JC1464		insulin-like growth factor-binding protein 5 precursor - human
21	20.1	20.1	310	2	A60967		insulin-like growth factor-binding protein 5 precursor - human
22	19.5	19.5	272	2	I44600		insulin-like growth factor-binding protein 5 precursor - human
23	19.2	19.2	317	2	I46116		insulin-like growth factor-binding protein 5 precursor - human
24	18.4	18.4	272	2	A36082		insulin-like growth factor-binding protein 5 precursor - human
25	17.9	17.9	304	2	A33274		insulin-like growth factor-binding protein 5 precursor - human
26	17.9	17.9	328	1	A41927		insulin-like growth factor-binding protein 5 precursor - human
27	17.7	17.7	259	1	IOU1		insulin-like growth factor-binding protein 5 precursor - human
28	17.3	17.3	122	2	T01404		insulin-like growth factor-binding protein 5 precursor - human
29	17.3	17.3	263	2	S23009		insulin-like growth factor-binding protein 5 precursor - human
30	17.2	17.2	305	2	I44601		insulin-like growth factor-binding protein 5 precursor - human
31	17.1	17.1	305	2	JN0508		insulin-like growth factor-binding protein 5 precursor - human
32	16.4	16.4	122	2	C45403		insulin-like growth factor-binding protein 5 precursor - human
33	12.2	12.2	439	2	S33293		insulin-like growth factor-binding protein 5 precursor - human
34	11.0	11.0	2767	1	UIHU		insulin-like growth factor-binding protein 5 precursor - human
35	10.7	10.7	1247	1	MMHUND		insulin-like growth factor-binding protein 5 precursor - human
36	10.2	10.2	492	2	A26297		insulin-like growth factor-binding protein 5 precursor - human
37	9.8	9.8	212	2	I46116		insulin-like growth factor-binding protein 5 precursor - human
38	9.8	9.8	314	2	A46489		insulin-like growth factor-binding protein 5 precursor - human
39	9.7	9.7	1376	2	G00043		insulin-like growth factor-binding protein 5 precursor - human

thyroglobulin precursor - human  
thyroglobulin 2 precursor - human  
nitrogen precursor - human  
M6 protein - strep  
M2 protein precursor - strep  
IgA receptor - strep

#### ALIGNMENTS

RESULT 1							
A53748	insulin-like growth factor-binding protein 5 precursor - human						
N; Alternate names: IGF-BP-5							
C; Species: Homo sapiens (man)							
C; Date: 06-Jan-1995 #sequence_revision 31-Dec-1995 #text_change 20-Mar-1998							
R; Accession: A53748; B40403; JH0391; P0143							
R; Allander, S.V.; Larsson, C.; Ehrenborg, E.; Suwanichkul, A.; Weber, G.; Morris, S.L.							
J. Biol. Chem. 269: 10891-10898, 1994							
A; Title: Characterization of the chromosomal gene and promoter for human insulin-like growth factor-binding protein 5							
A; Reference number: A40403; MUID:91193798							
A; Accession: B40403							
A; Status: Preliminary							
A; Molecule type: mRNA							
A; Residues: 1-272 (SH1)							
A; Cross-references: GB:M62782; PID:g184817; PID:g184818							
R; Kiefer, M.C.; Ich, R.S.; Bauer, D.M.; Zapf, J.							
Biochem. Biophys. Res. Commun. 176, 219-225, 1991							
A; Title: Molecular cloning of a new human insulin-like growth factor-binding protein.							
A; Reference number: JH0391							
A; Accession: JH0391							
A; Molecule type: mRNA							
A; Residues: 1-272 (SH1)							
A; Cross-references: GB:M65062; PID:g184819; PID:g184820							
R; Andress, D.L.; Barnbaum, R.S.							
Biochem. Biophys. Res. Commun. 176, 213-218, 1991							
A; Title: A novel human insulin-like growth factor-binding protein secreted by osteoblasts							
A; Reference number: PH0143; MUID:91207395							
A; Accession: PH0143							
A; Molecule type: protein							
A; Residues: 24-37, 'X', 39-41, 'X', 43 (AND)							
A; Experimental source: cell line V-2							
C; Comment: insulin-like growth factors occur in serum and other biological fluids							
C; Genetics:							
A; Gene: GDB:IGFBP5							
A; Cross-references: GDB:126837							
A; Map position: 17q12-17q21							
C; Superfamily: thyroglobulin type I repeat homology							
F; 1-23/Domain: signal sequence predicted <SIG>							
F; 24-272/Product: insulin-like growth factor-binding protein 5 #status predicted <IGF>							
F; 192-263/Domain: thyroglobulin type I repeat homology <THY>							
Query Match 99.4%; Score 995; DB 2; Length 272;							
Best Local Similarity 99.5%; Pred. No. 1.1e-76;							
Matches 185; Conservative 0; Mismatches 1; Indels 0; Gaps 0;							
Qy 1 EKPHALIIGRGYCLNEKREQVKIERSREHPEPTTSEMAETYSPIKFRPHTRTE 60							
Db 87 EKPHALIIGRGYCLNEKREQVKIERSREHPEPTTSEMAETYSPIKFRPHTRTE 146							
2Y 61 LKAEEVKKRPLKLTQSKVFGAENTAHRISEPEMRSEEQGPCCRMEASLQELKAS 120							



A:Status: preliminary  
 A: Molecule type: Protein  
 A: Residues: 20-25, 'X', 27-28, 'X', 30-36, 'X', 38-43, 'X', 45-51, 'X', 53, 'X' <SH2>  
 C: Genetics:  
 A: Introns: 112/3; 188/3; 228/3  
 C: Superfamily: thyroglobulin type I repeat homology  
 F: 1-19/Domain: thyroglobulin type I repeat homology  
 F: 20-27/Domain: insulin-like growth factor binding protein 5 #status predicted <SIG>  
 F: 20-27/Product: insulin-like growth factor binding protein 5 #status predicted <SIG>  
 F: 191-262/Domain: thyroglobulin type I repeat homology <TH1>

Query Match 96.4%; Score 965; DB 2; Length 271;  
 Best Local Similarity 95.2%; Pred. No. 3.e-74;  
 Matches 177; Conservative 3; Mismatches 6; Indels 0; Gaps 0;

Qy 1 EKPHALIHLGRGVCLNEKSYREQVKIERDSRHEEPTISEMAETYSPPKIFRPKHKTRISE 60  
 Db 86 EKPHALIHLGRGVCLNEKSYEQTKIERDSRHEEPTISEMAETYSPPVFRPKHKTRISE 145

Qy 61 LKAEAVKKRRKKLTQSKFVGAENTAHPR1ISEPEPMQESEQGPCCRMEASLQEIKAS 120  
 Db 146 LKAEAVKKRRKKLTQSKFVGAENTAHPR1ISEPEPMQESEQGPCCRMEASLQEIKAS 205

Qy 121 PRAYPRAVILPNCDRKGFYKIKRQCKPSRGRKRGICWCKVQYGMKLPGMNEYVGDGFQCHAF 180  
 Db 206 PRAYPRAVILPNCDRKGFYKIKRQCKPSRGRKRGICWCKVQYGMKLPGMNEYVGDGFQCHAF 265

Qy 181 DSSNVE 186  
 Db 266 DSSNVE 271

RESULT 5  
 JN0064 insulin-like growth factor-binding protein 3 precursor - bovine  
 C:Species: Bos primigenius taurus (Cattle)  
 C:Date: 21-Nov-1993 #sequence\_revision 05-Apr-1995 #text\_change 05-Sep-1997  
 C:Accession: JN0064; A37403  
 R:Spratt, S.K.; Tatsuno, G.P.; Sommer, A.  
 Biochem. Biophys. Res. Commun. 177, 1025-1032, 1991  
 A:Title: Cloning and characterization of bovine insulin-like growth factor binding protein  
 A:Reference number: JN0064; MUID:91282738  
 A:Accession: JN0064  
 A: Molecule type: mRNA  
 A: Residues: 1-291 <SPR>  
 A:Cross-references: GB:M76478; NID:9163189; PID:9163190  
 A:Experimental source: liver  
 R:Conover, C.A.; Ronk, M.; Lombana, F.; Powell, D.R.  
 Endocrinology 127, 2795-2803, 1990  
 A:Title: Structural and biological characterization of bovine insulin-like growth factor  
 A:Reference number: A37403; MUID:91065246  
 A:Accession: A37403  
 A: Molecule type: protein  
 A: Residues: 28-52 <CON>  
 C: Genetics:  
 A:Gene: IGFBP-3  
 C: Superfamily: insulin-like growth factor binding protein 1; thyroglobulin type I repeat  
 C:Keywords: glycoprotein  
 C:Domain: signal sequence #status predicted <SIG>  
 F: 28-29/Domain: insulin-like growth factor-binding protein 3 #status predicted <SIG>  
 F: 213-285/Domain: thyroglobulin type I repeat homology <TH1>  
 F: 118,136,199/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 35.3%; Score 353; DB 1; Length 291;  
 Best Local Similarity 37.6%; Pred. No. 9.3e-23;  
 Matches 73; Conservative 28; Mismatches 73; Indels 20; Gaps 4;

Qy 2 KPLHALIHLGRGVCLNEKSYRE----QVKIERDSRHEEPTISEMAETYSPPK1---- 51  
 Db 104 RPLQALDGRGLCANASAVGRRLRPYLIIPSASNGSESEEDHSMGSTENQGPSTHRVPS 163

Qy 51 -FRPKHTRSELKAAVKDKRKLQJOSKEYGAENTAHPR1ISEPEMNRQSEQGPCCRHH 109

Db	164	KFPIIHTRMVVIKKHARDSSQYRKYDYESQSTDQNFs-----SESKRETEYGPCCRRE	216
Qy	110	MEASLQEQLKASPRMVPRAVYLPNCDRKGFYKRKOCKPSGRKRGICWCKYGMKLPGM	169
Db	217	MEDILNHLKFLNMLSPRGH1P5PRGIHIPNCDKGFYKKRKOCPSPSKRKRKGFCWCKYGOPLPGFD	276
Qy	170	YV-DGDFQCHTFDS 182	
Db	277	VKGKGDVHCVSMES 290	
RESULT	6		
A35037		insulin-like growth factor-binding protein 3 homolog - pig	
C:Species		Sus scrofa domestica (domestic pig)	
C:Date		20-Jul-1990 #sequence_revision 20-Jul-1990 #text_change 01-Dec-1995	
C:Accession		A35037	
R:Shimasaki, S.; Shimonaka, M.; Ui, M.; Inouye, S.; Shibata, F.; Lihg, N.			
J. Biol. Chem. 265, 2198-2202, 1990			
A:Title		Structural characterization of a follicle-stimulating hormone action	
A:Reference number		A35037; MUID:90130475	
A:Accession		A35037	
A:Status		preliminary	
A:Molecule type		mRNA	
A:Residues		1-266 <SH1>	
A:Cross references		GB:J05228	
C:Superfamily		insulin-like growth factor binding protein 1; thyroglobulin type I repeat homology <THY1> F188-260/Domain: thyroglobulin type I repeat homology <THY1>	
Query Match	34.6%	Score 346; DB 2; Length 266;	
Best Local Similarity	37.7%	Pred. No. 3.3e-22;	
Matches	72;	Conservative 32; Mismatches 75; Indels 12; Gaps	
Qy	2	KPILHALLIGRGVCLNEKS-----YRDQVKIERSHEEPTISEMAETPSKIFRPK	54
Db	77	RPIQALIDGRRGTCANASAGRLRAYLLPAPPAPGNGSEEDSPVSDVSMENQALPSTHRVP	136
Qy	55	HTRISEL - KALEAKKDRKKLITQSKFVGAENTAHPAHLISEPQMRESEQGPGRRIHEA	112
Db	137	DSKHSVTKTMDVIKKHAKDSQYRKYDYESQSTDQNFSS - ESKRETEYGPCCRRE	194
Qy	113	SLOEQLKASPRMVPRAVYLPNCDRKGFYKRKOCKPSGRKRGICWCKYGMKLPGM	172
Db	195	TLNHLKFLNMLSPRGH1P5PRGIHIPNCDKGFYKKRKOCPSPSKRKRKGFCWCKYGOPLPGFDYKG	254
Qy	172	DGDFQCHTFDS 182	
Db	255	KGDVHCVSMES 265	
RESULT	7		
IOHU3		insulin-like growth factor-binding protein 3 precursor - human	
N:Alternative names		insulin-like growth factor 53k binding protein	
C:Species		Homo sapiens (man)	
C:Date		30-Sep-1992 #sequence_revision 30-Sep-1992 #text_change 24-Oct-1997	
C:Accession		A36578; A36490; A61038; B35803; B54651; I37622	
R: Cubbage, M.L.; Suwanichkul, A.; Powell, D.R.			
J. Biol. Chem. 265, 12642-12649, 1990			
A:Title		Insulin-like growth factor binding protein-3. Organization of the h	
A:Reference number		A36578; MUID:90324259	
A:Accession		A36578	
A:Molecule type		DNA	
A:Residues		1-291 <CH2>	
A:Cross references		GB:MB35878; GB:J05537; NID:9184522; PID:9386791	
R:Wood, W.I.; Cachianes, G.; Henzel, W.J.; Winslow, G.A.; Spencer, S.A.; Hell, M.J.			
Mol. Endocrinol. 2, 1176-1185, 1988			
A:Title		Cloning and expression of the growth hormone-dependent insulin-like	
A:Accession		A36490; MUID:8912197	
A:Molecule type		mRNA	



Qy 110 MEASLQELKASPRMVPRAVYLPIKROCKPSSRGKRGTCWVYDKYGMKLPGME 169  
 Db 218 MEDTLNLKFLNVLSPRGVHIPPNCDFKGFYKKKCRPSKGRKRGFCWCVDKYGQPLPGYD 277

RESULT 9  
 I48602 insulin-like growth factor binding protein 3 - mouse  
 C;Species: Mus musculus (house mouse)

C;Accession: I48602  
 R;Schuller, A.G.; Groffen, C.; van Neck, J.W.; zwarthoff, E.C.; Drop, S.L.  
 A;Title: CDNA cloning and mRNA expression of the six mouse insulin-like growth factor binding protein genes  
 A;Reference number: I48600; MUID:95121750

A;Accession: I48602  
 A;Status: preliminary; translated from GB/EMBL/DDJB  
 A;Molecule type: mRNA  
 A;Residues: 1-291 <RES>  
 A;Cross-references: EMBL:X18181; PID:9550380; PID:9550381  
 C;Genetics:

A;Gene: IGFBP-3  
 C;Superfamily: insulin-like growth factor binding protein 1; thyroglobulin type I repeat F;213-285/Domain: thyroglobulin type I repeat homology <THY1>

Query Match Score 321; DB 2; Length 291;

Best Local Similarity 36.7%; Pred. No. 4.5e-20; Matches 66; Conservative 27; Mismatches 67; Indels 20; Gaps 3;

Db 104 PFLALLNGRGFCVNLKANASAGSLSYLPSQFAPGNSIESEEHNAVSSEQVSPSTHRVTD 163

Qy 51 -FPKHTRISELKAEEVKKDRKKLTLQSKFVGGAENTAHPRITSEPEMPEQSEGPCCRH.109  
 Db 164 KFPFLHAKMDVIKGHARDSSQRKVVDYEQSTDQNFs-----SESKRTEVGPCCRRE 216

Qy 110 MEASLQELKASPRMVPRAVYLPIKROCKPSSRGKRGTCWVYDKYGMKLPGME 169  
 Db 217 MEDTLNLKFLNVLSPRGVHIPPNCDFKGFYKKKCRPSKGRKRGFCWCVDKYGQPLPGYD 276

RESULT 10  
 B45403 insulin-like growth factor binding protein 5 - bovine (fragment)

C;Species: Bos primigenius tauris (cattle)  
 C;Date: 10-Jun-1993 #sequence\_revision 18-Nov-1994 #text\_change 29-Jan-1999  
 C;Accession: B45403

R;Moser, D.R.; Lowe, J.W.; Dale, B.L.; Booth, B.A.; Boes, M.; Clemons, D.R.; Barr, F...  
 A;Title: Endothelial cells express insulin-like growth factor-binding proteins 2 to 6.  
 A;Reference number: A45403; MUID:9312553

A;Accession: B45403  
 A;Molecule type: nucleic acid  
 A;Residues: 1-111 <MO5>  
 A;Cross-references: GB:S52657; PID:9263305  
 A;Experimental source: endothelial cells  
 A;Note: sequence extracted from NCBI backbone (NCBIP:1122190)

Query Match Score 308; DB 2; Length 111;

Best Local Similarity 90.3%; Pred. No. 1.9e-19; Matches 58; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 53 EKPLHALLHGRGVLNEKSYREQVKIERSREHPEPTSEMAEETYSPKIFRKHTRIS 59

Qy 1 EKPLHALLHGRGVLNEKSYREQVKIERSREHPEPTSEMAEETYSPKIFRKHTRIS 111

Db 53 EKPLHALLHGRGVLNEKSYREQVKIERSREHPEPTSEMAEETYSPKIFRKHTRIS 111

RESULT 11  
 A39842 insulin-like growth factor binding protein 6 precursor - human  
 Ni;Alternative names: IGFBP-6; insulin-like growth factor II-binding protein  
 C;Species: Homo sapiens (man)  
 C;Date: 20-Mar-1992 #sequence\_revision 31-Dec-1995 #text\_change 10-Sep-1997  
 C;Accession: A39842; B23734; PH0144; A35470; C35803  
 R;Kiefer, M.C.; Masiarz, F.R.; Bauer, D.M.; Zapf, J.  
 J. Biol. Chem. 266, 9043-9049, 1991.  
 A;Title: Identification and molecular cloning of two new 30-kDa insulin-like growth factor-binding protein secreted by osteoblasts  
 A;Reference number: A39842; MUID:91225006  
 A;Accession: B23734  
 A;Status: preliminary  
 A;Molecule type: mRNA  
 A;Residues: 1-240 <KIE>  
 A;Cross-references: GB:MG62402; NID:9184813; PID:9184814  
 R;Shimakai, S.; Gao, L.; Shimomaka, M.; Ling, N.  
 Mol. Endocrinol. 5, 938-948, 1991.  
 A;Title: Isolation and molecular cloning of insulin-like growth factor-binding protein 6  
 A;Reference number: A23734; MUID:92049376  
 A;Accession: B23734  
 A;Status: preliminary  
 A;Molecule type: mRNA  
 A;Residues: 'C'-3-240 <SH1>  
 A;Cross-references: GB:MG62054; NID:9183893; PID:9183894  
 R;Andress, D.L.; Birnbaum, R.S.  
 Biochem. Biophys. Res. Commun. 176, 213-218, 1991.  
 A;Title: A novel human insulin-like growth factor binding protein secreted by osteoblasts  
 A;Reference number: PH0143; MUID:91207395  
 A;Accession: PH0144  
 A;Molecule type: protein  
 A;Residues: 'XX', 'P', '33-39, 'X', '41-42 <AND>  
 A;Experimental source: cell line V-2  
 R;Martin, J.L.; Willatts, K.E.; Baxter, R.C.  
 J. Biol. Chem. 265, 4124-4130, 1990.  
 A;Title: Purification and properties of a novel insulin-like growth factor-II binding protein  
 A;Reference number: A35470; MUID:90154107  
 A;Status: preliminary  
 A;Molecule type: protein  
 A;Residues: 'A', '30-39 <MAR>  
 R;Zapf, J.J.; Kiefer, M.; Merryweather, J.; Masiarz, F.; Bauer, D.; Born, W.; Fischer, J. Biol. Chem. 265, 14892-14898, 1990.  
 A;Title: Isolation from adult human serum of four insulin-like growth factor (IGF) binding proteins  
 A;Reference number: A35803; MUID:90368661  
 A;Accession: C35803  
 A;Status: preliminary  
 A;Molecule type: protein  
 A;Residues: 'AA', '30-31, 'H', '33-54, 'QXG' <ZAP>  
 C;Genetics:

A;Gene: GDB:IGFBP6

A;Cross-references: GDB:127456; OMIM:146735

A;Map position: 12pter-12pter

C;Superfamily: thyroglobulin type I repeat homology

C;Keywords: glycoprotein

F;1-27/Domain: signal sequence #status predicted <SIG>

F;28-24/Product: insulin-like growth factor-I repeat homology <THY1>

F;163-234/Domain: thyroglobulin type I repeat homology <THY1>

F;229/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match Score 267.5; DB 2; Length 240;

Best Local Similarity 32.4%; Pred. No. 1.1e-15; Matches 59; Conservative 31; Mismatches 59; Indels 33; Gaps 4;

Qy 1 EKPLHALLHGRGVLNEKSYREQVKIERSREHPEPTSEMAEETYSPKIFRKHTRIS 60

Db 91 EAPLRLALLGRGVLNEKSYREQVKIERSREHPEPTSEMAEETYSPKIFRKHTRIS 61

Qy 61 LKAEEAKKDRKKLTKOSKFGVGAENTAHPRITSEPEMPEQEEQGPQRHMEASLQELIKAS 120

Db 123 -QAGTARPDYVNRRDQNPQTSTPSQPNASAGV---QDTEMGPQRRLDVSLOQLOTE 177

Qy 121 PRMVRAYLPNCNRKGFYKQRKQCKPSRGRKRGICWVYDKYGMKLPGMEYVGDGFQCHF 180



Db 247 LDCHQLADS 255

RESULT 15  
 147031  
 Insulin-like growth factor-binding protein-4 - sheep (fragment)  
 C: Species: Ovis sp. (sheep)  
 C: Date: 15-Oct-1996 #sequence\_revision 15-Oct-1996 #text\_change 10-Oct-1997  
 C: Accession: 147031  
 R: Carr, J.M.; Grant, P.A.; Francis, G.L.; Owens, J.A.; Wallace, J.C.; Walton, P.E.  
 J: Mol. Endocrinol. 13, 219-236, 1994  
 A: Title: Isolation and characterization of ovine IGFBP-4: protein purification and cDNA  
 A: Reference number: 147031: MUID:93151165  
 A: Accession: 147031  
 A: Status: preliminary; translated from GB/EMBL/DDJB  
 A: Molecule type: mRNA  
 A: Residues: 1-237 <CAB>  
 A: Cross references: GB:S77394; NID:9944951; PID:9944952  
 C: Superfamily: thyroglobulin type I repeat homology <THY1>  
 F: 153-228/Domain: thyroglobulin type I repeat homology <THY1>

Query Match Score 238; DB 2; Length 237;  
 Best Local Similarity 32.3%; Pred. No. 3.4e-13;  
 Matches 61; Conservative 25; Mismatches 77; Indels 26; Gaps 6;  
 Qy 1 EKDLHALLHGRGCLNEKSYREQVKIE--RDSREHEEPTISEMAETYSPKIFRPKHKTRI 58  
 Db 66 EKEELHTLTHGQGCM----ELEIEIAQESLQPSDKDEGDPNNSFSP----CSAHDHK 116  
 Qy 59 SELKAEAVKKDRRKLTQSKFVGGAAENTAHPRII1SEPMRQESEQGPCRRHMAASIQELK 118  
 Db 117 CLOKHLAKIRDRTSGGKRVIGAPREEYRP-----VPGGSCQSELHRLERLA 165  
 Qy 119 ASPRMVPRAVY--LPNCDRKFGFKRKQCKPSGRKRGTCWCD-KYGMKLPGMFYVGD 174  
 Db 166 ASQSRTHEDLYIIPNCDRNGNHPKQCHPAQDQRGWCWDRKTGKLPGLEPKGE 225  
 Qy 175 FQCHTFDSS 183  
 Db 226 LDCHQLADS 234

Search completed: October 15, 1999, 00:29:33  
 Job time: 2177 sec